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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,443	02/20/2001	Hyeon Jun Kim	P-187	5049

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EXAMINER
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WU, JINGGE

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 01/20/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/785,443

Applicant(s)

KIM ET AL.

Examiner

Jingge Wu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 19-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-18 and 28-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

Applicant's election with traverse of species I in paper No. 5 is acknowledged. Regarding to Applicant's argument in paper No. 5, Examiner believed that the species I is directed to a method, or system for content-based image retrieval. the species II and species III are directed to **different embodiments** of methods or systems for content-based image retrieval as indicated in the specification (page 9-10, page 34 and page 36). In addition, the examiner has correctly identified the figures represented the different embodiments of the inventions. Accordingly, Claims 1-18 and 28-33 are now presented for prosecution. Claims 19-27 (not read on the fig. 5) are withdrawn from consideration.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-11, 13-33 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6564263 to Bergman et al..

As to claim 1, Bergman discloses a content-based multimedia retrieval system, comprising:

a first quantization means for extracting a color histogram of query multimedia data (col. 13 lines 45-col. 14 line 2, a first quantization means is inherent)

a second quantization means for extracting a color histogram of query multimedia data (col. 13 lines 45-col. 14 line 2, a second quantization means is inherent because of extracting different color histograms in different color spaces); and

a histogram conversion means for converting the color histogram of the extracted query multimedia data and the color histogram of the multimedia data to be retrieved so as to be same each other (fig. 19, col. 13 line 16-col. 14 line 2).

As to claim 2, Bergman further discloses the multimedia data are image data or video data (fig. 9 and fig. 16).

As to claim 3, Bergman further discloses the color histograms are constructed based on color spaces and color quantization methods (fig. 19, col. 13 lines 45-col. 14 line 2).

As to claim 4, Bergman further discloses description means for describing color spaces and color quantization methods (e.g., rgb512, note that rgb describes RGB color space and 512 describes 512 bin histogram) (fig. 19, col. 13 lines 45-col. 14 line 2)

As to claim 5, Bergman further discloses converting the histogram of the query multimedia data so as to be corresponding to color space and color quantization method of the multimedia data to be retrieved (fig. 19, col. 13 line 18-col. 14 line 40).

As to claims 6-8, the claims are the corresponding method claims to claims 1-3, respectively. The discussion are addressed with regard to claims 1-3.

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As to claim 9, Bergman further discloses:

judging whether the color histogram of query multimedia data is extracted before (fig. 19, col. 13 line 18-col. 14 line 40; note that finding whether the user generated histogram Q is the judgment);

reading a color histogram value extracted before (user generated before) and the multimedia data to be retrieved (archives) and identifying based color space and quantization method (fig. 19, col. 13 line 18-col. 14 line 40, note that it is inherent); and

converting the color histograms into the color histograms of the same color space and color quantization method when the histograms are not same (fig. 19, col. 13 line 18-col. 14 line 40).

As to claims 10-11, Bergman further discloses extracting the histogram when there is no user created histogram of the inputted query data (fig. 19, col. 13 line 18-col. 14 line 40), and the converting process is performed by referencing the color space description info and quantization info of the multimedia data to be retrieved and query data (fig. 19, col. 13 line 18-col. 14 line 40).

As to claims 13-18, 28-33, the discussions are addressed with regard to claims 1-11.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergman in view of US 6512850 to Yaung.

As to claim 12, Bergman does not explicitly mention comparing the similarity with a certain threshold value which is well known in the art.

Yaung, in an analogous environment, discloses the well known concept (13, line 46-col. 14 line 67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Yaung in the system of Bergman to compare the similarity of histogram colors with a threshold in order to accurately identify the image to be retrieved.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6411724 to Vaithilingam et al., US 6285995 and US 6163622 to Abdel-Mottaleb et al., US 6621926 to Yoon et al., and the article "Multimedia content description in the infopyramid" to Li et al. disclose methods for retrieving images by comparing color histograms.

### **Contact Information**

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Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be reached Monday through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Primary Patent Examiner

